

### REMARKS

Claims 1 to 13, 79 to 82 and 93 to 108 are pending in this application. Claims 5 to 13, 79 to 82, 94 to 96, 101 to 103 and 105 to 108 have been allowed. No amendments are proposed at this time.

The Office has maintained its rejection of claims 1 to 4, 93, 97 to 100 and 104, as allegedly obvious over Mansour (U.S. Patent No. 6,057,165) in view of Goldstein (U.S. Patent No. 6,720,191). Applicants again traverse this rejection for the reasons discussed in applicants' Amendment Under 37 C.F.R. §1.116, which was filed February 7, 2006 (the arguments of which are incorporated herein by reference in their entirety). Applicants address below the Office's comments set forth in the "Response to Arguments" section of the present Office Action.

As applicants have discussed in their previous Amendment, the device described in Mansour is a flow-through device. This is made clear throughout the specification of Mansour, and becomes particularly clear in reading Mansour's title, i.e., "Quality control procedure for membrane flow-through diagnostic assay devices." The Office apparently agrees, having acknowledged this fact at page 4. Nevertheless, the Office suggests that applicants have somehow misconstrued the nature of Mansour's device, saying (at page 4) that:

The fluid sample in the device does not flow through the entire device – it merely flows through the absorbent layers so that analytes in the sample can bind with the reagent. (Emphasis original).

The Office acknowledges (at page 4) that the absorbent layer shown in Mansour "is necessary for liquid analysis so that the liquid sample reaches the assay reagents and accurate results can be obtained," but then surprisingly concludes that "nothing in Mansour would preclude substituting the absorbent laminate with a carrier such as the pressure adhesive tape of Goldstein for analysis solid (sic) samples."

Applicants have not misconstrued the nature of the device of Mansour. It is a flow-through device that uses an absorbent layer which functions, e.g., to provide a driving force on reagents applied to the assay device's test area, such that they flow into the absorbent layer (see, e.g., Mansour at col. 5, lines 6 to 13). Applicants submit that the Offices' analysis of Mansour

clearly discounts, *inter alia*, the fact that substituting the tape of Goldstein for Mansour's absorbent layer would destroy the function of Mansour's device. It would no longer work as a flow through assay. Clearly, skilled practitioners would have recognized the nature of Mansour's device and, therefore, none would have endeavored to replace Mansour's absorbent structure with a non-absorbent tape, such as the one described in Goldstein. None would have sought to use Mansour's device for solid sampling and analysis. There would simply have been no motivation for skilled practitioners to do so. Motivation to make such a modification to Mansour's device cannot be found in Mansour, Goldstein, or anywhere else in the art.

The Office nevertheless attempts to justify the combination by, *inter alia*, characterizing the proposed modification as "simple," saying (at page 4):

The Examiner's proposed modification is simple – to remove the absorbent structure and replace it with a pressure adhesive tape that would be more suitable for solid sampling and analysis. No hindsight reasoning need be used, since Mansour teaches that absorbent layers are preferable for liquid samples and Goldstein teaches that pressure adhesive tapes are preferable for solid samples. The modification would allow the device of Mansour to function in the manner disclosed, the only difference being the carrier type.

Applicants do not agree that this modification is simple, nor do they agree that the device would be able to function in the manner disclosed in Mansour if the modification were made. The modification requires replacing the absorbent layer which, as the Office action itself acknowledges, is necessary for Mansour's device to function in the manner disclosed. This would clearly prevent the device from functioning in the manner disclosed in Mansour. Given this fact, applicants see no other way to conclude that the present claims are obvious in view of these two references other than through the use of impermissible hindsight reasoning. This deficiency would not be remedied even if one were to accept, *arguendo*, the Office's characterization of the replacement as a simple one.

Although mentioned in their previous Amendment, applicants believe it bears mentioning again that *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Circ. 1984), and the MPEP section that discusses it (MPEP §2143.01(V)), appear relevant here. A copy of *In re Gordon* is attached for the Examiner's convenience. The MPEP section states (emphasis added):

If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Circ. 1984). (Claimed device was a blood filter assembly for use during medical procedures wherein both the inlet and outlet for the blood were located at the bottom end of the filter assembly, and wherein a gas vent was present at the top of the filter assembly. The prior art reference taught a liquid strainer for removing dirt and water from gasoline and other light oils wherein the inlet and outlet were at the top of the device, and wherein a pet-cock (stopcock) was located at the bottom of the device for periodically removing the collected dirt and water. The reference further taught that the separation is assisted by gravity. The Board concluded the claims were *prima facie* obvious, reasoning that it would have been **obvious to turn the reference device upside down**. The court reversed, finding that **if the prior art device was turned upside down it would be inoperable for its intended purpose** because the gasoline to be filtered would be trapped at the top, the water and heavier oils sought to be separated would flow out of the outlet instead of the purified gasoline, and the screen would become clogged.).

The modification proposed by the Office in the present rejection suffers a deficiency similar to that proposed by the Office in the *In re Gordon* case. The proposed modification by the Office in this case changes the Mansour device into a non-flow-through device, thereby rendering it unsatisfactory for its intended purpose. There is no suggestion or motivation to make the proposed modification and a *prima facie* case of obviousness has not been established.

The Office has not established that a skilled practitioner would be motivated by Mansour, Goldstein, or the knowledge generally available in the art, to combine Mansour and Goldstein in an effort to arrive at the present invention. Further, as discussed in applicants' Amendment of February 7, 2006, even if they were combined, they still would not teach or suggest all of the limitations recited in the claims. Thus, applicants maintain that the Office has failed to establish a *prima facie* case of obviousness against claims 1 to 4, 93, 97 to 100 and 104, and request that the present rejection be reconsidered and withdrawn.

Applicant : Baer, et al.  
Serial No. : 09/844,187  
Filed : April 26, 2001  
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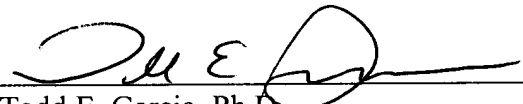
Attorney's Docket No.: 14255-034001 / ARC01-  
20018.00

CONCLUSION

Applicants submit that all pending claims are now allowable and respectfully request a notice of allowance. Enclosed is a \$1,020.00 check for the Petition for Extension of Time fee, along with a Petition for a Three Month Extension of Time. No excess claims fees are believed to be due. Please apply any other charges or credits to deposit account 06-1050, referencing Attorney Docket No. 14255-034001.

Respectfully submitted,

Date: 9/22/06

  
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(Cite as: 733 F.2d 900)

**C**

United States Court of Appeals,  
Federal Circuit.

In re Lucas S. **GORDON** and Karl M. Sutherland.

**Appeal No. 83-1281.**

**Serial No. 124312.**

May 10, 1984.

Appeal was taken from a decision of the United States Patent and Trademark Office Board of Appeals affirming an examiner's rejection of appellants' claims one to three and five to seven of application serial No. 124,312 relating to a blood filter assembly. The Court of Appeals, Jack R. Miller, Circuit Judge, held that Board failed to establish a prima facie case of obviousness with regard to the claims in issue.

Reversed.

West Headnotes

#### **Patents** ⇐16.17

291k16.17 Most Cited Cases

Patent and Trademark Office Board of Appeals failed to establish a prima facie case of obviousness with regard to claims one to three and five to seven of application serial No. 124,312 relating to a blood filter assembly. 35 U.S.C.A. § 103.

#### **Patents** ⇐328(2)

291k328(2) Most Cited Cases

1,175,948. Cited as prior art.

**\*900** James W. Geriak, Los Angeles, Cal., argued for appellants. With him on brief was Bradford J. Duft, Los Angeles, Cal.

John F. Pitrelli, Arlington, Va., argued for appellee. With him on brief were Joseph F. Nakamura, Sol. and John W. Dewhirst, Associate Sol., Washington, D.C.

Before BENNETT, Circuit Judge, SKELTON, Senior Circuit Judge, and MILLER, Circuit Judge.

JACK R. MILLER, Circuit Judge.

This appeal is from the decision of the United States Patent and Trademark Office ("PTO") Board of Appeals ("board") affirming the examiner's rejection of appellants' claims [FN1] 1-3 and 5-7 as unpatentable under 35 U.S.C. § 103. We reverse.

FN1. In application Serial No. 124,312, filed February 25, 1980, for a "Blood Filter."

#### THE INVENTION

Appellants claim a "blood filter assembly" used during surgery and other medical procedures involving the handling of blood to remove clots, bone debris, tissue, or other foreign materials from blood before it is returned to a patient's body. Unlike blood filter assemblies widely used in the prior art, the device of the present invention permits both entry of the blood into, and ultimate discharge of the blood out of, the *bottom* end of the filter assembly, as shown below. [FN2]

FN2. Extraneous numbers have been removed from this and the subsequent drawing for clarification.

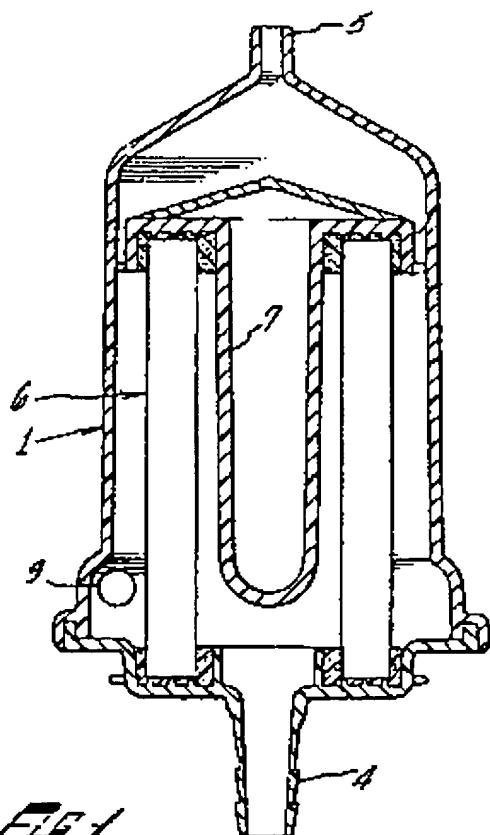
**\*901**

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The blood filter assembly comprises a shell 1 provided with blood inlet 3 and blood outlet 4. Between the blood inlet and the blood outlet is filter medium 6 positioned within the filter medium core 7.

The location of blood inlet 3 is such that the incoming blood is directed along a spirally upward path by the inner wall of the shell. Further, the location of the blood inlet at the bottom end of the filter assembly facilitates the removal of gas bubbles by allowing them to rise upwardly out of the blood. The gas bubbles so removed are released from the blood filter assembly by means of a gas vent 5 located in the region of the top end of the assembly.

Independent claim 1, from which the other appealed claims depend, is illustrative:

Blood filter assembly comprising:

- a. a shell having a first top end and a second bottom end,
- b. a blood inlet located in the region of said bottom end and opening into said bottom end,
- c. a blood outlet located in the region of said bottom end,
- d. a gas vent located in the region of said top end, and
- e. a blood filter medium located between said blood inlet and said blood outlet, said blood inlet being located and configured in a manner capable of directing incoming blood in a generally spiral path within said shell.

Claims 2, 3, and 5-7 further define the shape of the shell, the shape of the filter medium, and the nature of the material used as the filter medium.

#### PRIOR ART

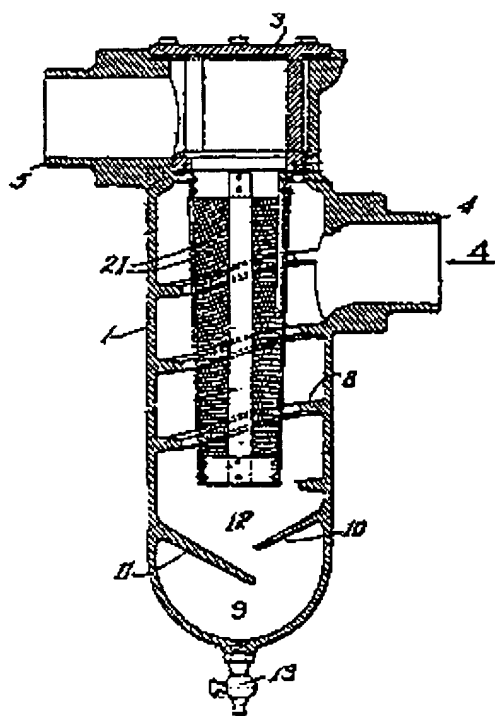
The sole reference relied upon by the board is United States Patent No. 1,175,948, issued March 21, 1916, to French. French discloses a liquid strainer for removing dirt and water from gasoline and other light oils. As shown below, the inlet 4 and outlet 5 of the French device are both at the *top* end of the device.

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\*902 A continuous helical tooth or thread 8 is formed integral with the inner wall of shell 1 and imparts to the incoming liquid a whirling motion, which gives the liquid a scouring action to help clean the surface of a metal screen filter 21 and guides unwanted dirt and water downwardly into a pocket 9 in the bottom of the shell. A pair of shelves 10 and 11, projecting inwardly and downwardly from the inner wall of the shell, further assists the entrance of dirt and water into the pocket 9 and prevents their being drawn back into the main chamber 12. The reference expressly states, "gravity assists in the separation of heavier oils or water." A pet-cock 13, projecting vertically downward from the bottom of the pocket is used to remove the collected dirt and water periodically. The top of the liquid strainer is completely closed by gland 3 except for the inlet and outlet openings.

#### BOARD OPINION

The board held that the appealed claims were

drawn to an apparatus which "would have at least been rendered *prima facie* obvious to one of ordinary skill in the art by the apparatus disclosed in French." The board's reasoning was that it would have been obvious to turn the French device upside down to have both the inlet and outlet at the bottom, rather than at the top; and to employ French's "pet-cock" as the claimed "gas vent." In the board's opinion, no patentable distinction was created by viewing French's apparatus from one direction and the claimed apparatus from another.

#### ANALYSIS

We are persuaded that the board erred in its conclusion of *prima facie* obviousness. The question is not whether a patentable distinction is created by viewing a prior art apparatus from one direction and a claimed apparatus from another, but, rather, whether it would have been obvious from a fair reading of the prior art reference as a whole to turn the prior art apparatus upside down. French teaches a liquid strainer which relies, at least in part, upon the assistance of gravity to separate undesired dirt and water from gasoline and other light oils. Therefore, it is not seen that French would have provided any motivation to one of ordinary skill in the art to employ the French apparatus in an upside down orientation. The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. See *Carl Schenck, A.G. v. Nortron Corp.*, 713 F.2d 782, 787, 218 USPQ 698, 702 (Fed.Cir.1983), and *In re Sernaker*, 702 F.2d 989, 995-96, 217 USPQ 1, 6-7 (Fed.Cir.1983), both citing *In re Imperato*, 486 F.2d 585, 587, 179 USPQ 730, 732 (CCPA 1973).

Indeed, if the French apparatus were turned upside down, it would be rendered inoperable for its intended purpose. The gasoline to be filtered would be trapped in pocket 9, and the water French seeks to separate would flow freely out of the outlet 5. Further, unwanted dirt would build up in the space between the wall of shell 1 and screen 21, so that, in time, screen 21 would become clogged unless a drain valve, such as pet-cock 13, were re-introduced at the new "bottom" of the apparatus. See *In re Schulpen*, 390 F.2d 1009,

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1013, 157 USPQ 52, 55 (CCPA 1968). In effect, French teaches away from the board's proposed modification.

Because the PTO has failed to establish a *prima facie* case of obviousness, the rejection of claims 1-3 and 5-7 as unpatentable under 35 U.S.C. § 103 must be *reversed*. [FN3]

FN3. Because our holding that the PTO has failed to establish a *prima facie* case is dispositive, it is unnecessary to reach other arguments raised by appellants.

REVERSED.

733 F.2d 900, 221 U.S.P.Q. 1125

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